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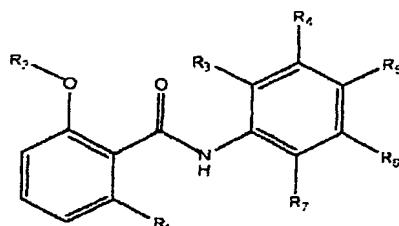
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

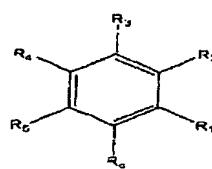
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[Continued on next page]

(54) Title: MODULATORS (INHIBITORS/ACTIVATORS) OF HISTONE ACETYLTRANSFERASES



Formula I



Formula II

WO 2004/053140 A3

(57) Abstract: The invention provides the use of certain benzoic acid and benzamide compounds as modulators of enzymes histone acetyltransferases, which are involved in gene expression and cancer and also use of such compounds in the treatment of diseases due to defects in gene regulation predominantly cancer.

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- *of inventorship (Rule 4.17(iv)) for US only*

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CLASSIFICATION OF SUBJECT MATTER

IPC⁷: C07C 233/66, A61K 31/165According to International Patent Classification (IPC) or to both national classification and IPC
B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

REGISTRY, CAPLUS, WPI, EPODOC, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	WO 2003103655 A1 (Institute of Medicinal Molecular Design, Inc., Japan) 18 December 2003 (18.12.2003) <i>compounds 2 (p.74), 121 (p.90), 254 (p.108).</i>	1-4
X	Humm, Alfred W.; Schneider, Martin R. "Development of potential nonsteroidal antiandrogens: N-[4-nitro-3-(trifluoromethyl)phenyl]cyclohexanecarboxamides and -benzamides and N-(3,4-dichlorophenyl)- and N-(3,4,5-trichlorophenyl)benzamides" Archiv der Pharmazie (Weinheim, Germany) (1988), 321(7), 419-22 (abstract). Chemical Abstracts [online] Copyright 2004 American Chemical Society [retrieved on 7 June 2004 (07.06.2004)]. Retrieved from STN International, Karlsruhe. Chem. Abstr. No. 1988:610640. <i>abstract, compounds II, III.</i>	1-3

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents: „A“ document defining the general state of the art which is not considered to be of particular relevance „E“ earlier application or patent but published on or after the international filing date „L“ document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) „O“ document referring to an oral disclosure, use, exhibition or other means „P“ document published prior to the international filing date but later than the priority date claimed	„T“ later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention „X“ document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone „Y“ document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art „&“ document member of the same patent family
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Date of the actual completion of the international search 9 June 2004 (09.06.2004)	Date of mailing of the international search report 7 July 2004 (07.07.2004)
Name and mailing address of the ISA/AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna Facsimile No. 1/53424/535	Authorized officer MÜLLER-HIEL R. Telephone No. 1/53424/434

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International application No.

PCT/IN 03/00389-0

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Waisser, K.; Hladuvkova, J.; Kunes, J.; Kubicova, L.; Klimesova, V.; Karajannis, P.; Kaustova, J. "Synthesis and antimycobacterial activity of salicylanilides substituted in position 5" Chemical Papers (2001), 55(2), 121-129 (abstract). Chemical Abstracts [online] Copyright 2004 American Chemical Society [retrieved on 7 June 2004 (07.06.2004)]. Retrieved from STN International, Karlsruhe. Chem. Abstr. No. 2001:436058. <i>abstract; Salicylanilide RN 87-17-2, 1152-51-8, 3679-63-8, 7120-46-9, 7164-80-9, 24448-71-3, 24448-73-5, 26480-22-8, 214350-27-3.</i>	1-3
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X	JP 02 306916 A2 (Otsuka Pharmaceutical Co., Ltd., Japan) 20 December 1990 (20.12.1990) <i>abstract; Benzamide, N-(2-chloro-4-nitrophenyl)-2-methoxy- (RN 133687-89-5).</i>	1,2
A	US 6369030 B (KUNDU TAPAS K. et al; UNIV. ROCKEFELLER) 9 April 2002 (09.04.2002) <i>abstract; col. 2, lines 58-64.</i>	4

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/IN 03/00389-0

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
	A		none	
JP	A 2306916A		none	
	2			
JP	A 20011395		none	
	50A2			
US	B 6369030	2002-04-09	none	
WO	A 20031036		none	
	55			